**General POS**

**Functional Requirements:**

**1. Transaction Processing:**

- Ability to process sales transactions including cash, credit/debit card, and other payment methods.

- Support for multiple forms of tenders (e.g., cash, credit card, gift card).

**2. Product Management:**

- Adding, updating, and deleting products from the system.

- Assigning unique identifiers (e.g., SKU) to products.

- Categorization and organization of products.

**3. Inventory Management:**

- Tracking of inventory levels in real-time.

- Automatic updates of inventory when a sale is made.

- Alerts for low stock levels or out-of-stock items.

**4. Reporting and Analytics:**

- Generation of sales reports, including daily, weekly, monthly summaries.

- Insights into top-selling products, peak sales hours, and customer trends.

- Exporting data for further analysis or integration with other systems.

**5. User Management:**

- Different levels of access for employees (cashiers, managers, administrators).

- Secure login/logout functionality.

- User activity logging for security and auditing purposes.

**6. Customer Management:**

- Ability to create customer profiles.

- Tracking customer purchase history.

- Loyalty program integration.

**7. Customization and Integration:**

- Ability to customize receipt layouts.

- Integration with accounting software for seamless financial management.

- Support for additional hardware such as barcode scanners, receipt printers, and cash drawers.

**Non-Functional Requirements:**

**1. Performance:**

- Fast response times during transactions.

- Scalability to handle increased transaction volumes during peak hours.

**2. Reliability:**

- Minimal downtime to ensure continuous operation.

- Data backup and recovery mechanisms to prevent loss of transactional data.

**3. Security:**

- Compliance with industry standards (e.g., PCI-DSS for payment card data security).

- Encryption of sensitive data such as customer information and payment details.

- Role-based access control to prevent unauthorized access to the system.

**4. Usability:**

- Intuitive user interface for ease of use by employees.

- Minimal training required for new staff to operate the system effectively.

**5. Compatibility:**

- Compatibility with various operating systems (Windows, macOS, Linux) and devices (desktops, tablets, mobile devices).

- Support for multiple languages and currencies if the business operates internationally.

**6. Scalability:**

- Ability to accommodate the growth of the business by adding new features or expanding hardware capabilities.

**7. Maintainability:**

- Ease of software updates and patches.

- Modular architecture to facilitate future enhancements or modifications.

**8. Cost:**

- Affordable initial setup costs.

- Transparent pricing for ongoing support, maintenance, and upgrades.